

## Preventive measures for infections in cholecystectomies: strategies and brazilian evidence

Dhiego Alves de Lacerda<sup>1</sup>  
Larissa Luana Lopes Lima<sup>1</sup>  
Pedro Fechine Honorato<sup>1</sup>  
Renata Braga Vale<sup>1</sup>  
Diego Formiga das Neves<sup>1</sup>  
Claudenor Pinho de Sá Filho<sup>1</sup>  
Thiago Quirino de Moura<sup>1</sup>  
Vinícius Costa Figueiredo<sup>1</sup>  
Anaylle Vieira Lacerda de Oliveira<sup>1</sup>  
Ubiraidys de Andrade Isidório<sup>2</sup>



10.56238/rcsv14n2-021

### 1 INTRODUCTION

Cholecystectomy, a surgical procedure performed to remove the gallbladder, is an intervention of great relevance in medical practice, and is often indicated for the treatment of biliary diseases, such as cholelithiasis and cholecystitis. In the Brazilian context, where the prevalence of these diseases is significant, cholecystectomy plays a fundamental role in the therapeutic approach.

However, despite technological advances and minimally invasive surgical techniques, postoperative infections persist as a feared and challenging complication associated with this procedure. As highlighted by Oliveira et al. (2020), "surgical infections continue to represent an important cause of morbidity and mortality, requiring the implementation of effective preventive strategies."

Given this scenario, it is imperative to explore and implement preventive measures capable of reducing the risk of infections in cholecystectomy surgeries. In Brazil, several studies have investigated such measures in order to improve the safety and efficacy of this procedure. According to Silva et al. (2020), "the prevention of infections in cholecystectomy surgeries is a constant concern of health professionals, demanding the adoption of rigorous and evidence-based protocols."

In this context, this review aims to critically examine the preventive strategies employed in cholecystectomy surgeries in Brazil, analyzing their efficacy and clinical relevance based on scientific evidence. Through the synthesis of recent studies and a review of the national literature, we seek to identify the best practices to prevent infections and promote better surgical outcomes for Brazilian patients.

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<sup>1</sup> Undergraduate student in Medicine, UNIFSM, Cajazeiras, PB.

<sup>2</sup> Graduated in Physical Therapy, Centro Universitário de João Pessoa, João Pessoa, PB

## 2 METHODS

For this review, we conducted a systematic search of the SciELO and PubMed databases using specific search terms, such as "cholecystectomy", "postoperative infection" and "prevention". Studies published between 2010 and 2024 that investigated preventive measures for infections in cholecystectomy surgeries performed in Brazil were selected.

## 3 RESULTS

The reviewed studies highlight a number of effective preventive measures to reduce the risk of infections in cholecystectomy surgeries. Pereira et al. (2022) noted that "intraoperative antibiotic prophylaxis was associated with a significant reduction in surgical site infection rates in patients undergoing laparoscopic cholecystectomy."

In addition, intraoperative infection control measures, such as improved asepsis techniques and the use of sterile drapes, have been associated with a further reduction in infection rates. Lima et al. (2021) concluded in their meta-analysis that "adequate preparation of the patient's skin prior to surgery can significantly reduce postoperative infection rates in cholecystectomy surgeries."

## 4 DISCUSSION

Effective implementation of preventive measures for infections in cholecystectomy surgeries is crucial to ensure patient safety and optimize surgical outcomes. Although many of the strategies discussed in this review have been shown to be effective in Brazilian studies, challenges remain in relation to consistent adherence to guidelines and ensuring adequate resources in all health settings.

## 5 CONCLUSION

Preventive measures for infections in cholecystectomy surgeries play a key role in the safety and efficacy of this surgical procedure. Strategies such as adequate antibiotic prophylaxis, improved asepsis techniques, and training of surgical staff are essential to minimize the risk of infectious complications and improve short- and long-term outcomes for patients.

## REFERENCES

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